

## USSR PLANNING OF INDUSTRIAL GROSS AND COMMODITY PRODUCTION

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Industrial gross and commodity production are among the most important indexes in the national economic plan. Gross production describes the volume of production of each enterprise, branch, and industry as a whole. It is planned in comparable (sopostavimyye) prices, which makes possible the calculation of the physical volume index for industrial output and discloses changes in the relationships among different branches. The labor plan indexes in the national economic plan are established according to gross production data — the output per worker for industry as a whole, and for each ministry.

Commodity production is especially important in defining the goals set for industrial costs, accumulation, and other financial indexes. The planning of commodity production is directly related to the goal of increasing and improving the use of cost accounting (khozraschet).

In the national economic plan the gross and commodity production goals are established for industry as a whole and for all-union and union-republic ministries, departments, and union-republic councils of ministers. Gross and commodity production volumes are established annually, further broken down by quarters.

The volume of gross and commodity production is determined in conjunction with the goals set for the production of industrial output in physical (natural'crease in the output of the major types of high-quality products necessary to the national economy. In practice, individual enterprises occasionally permit ing to fulfill the production plan for the most important types specified in the state plan.

Uninterrupted growth in the output of industrial products must be achieved, above all, by improving the utilization of existing productive capacities, introduction of new, highly productive machines and equipment and advanced technological processes, continual growth of labor productivity, maximum reduction of losses, and mobilization of internal production reserves.

The gross production of an enterprise is the value of the product produced by this enterprise per year (quarter, month); it includes both transferred (perenesennaya) value and newly created value, and characterizes the result of the enterprise's work over a specified period. Into gross production goes the value of finished production, semimanufactures, industrial processing work, and unfinished production.

Commodity production is made up of finished output and semimanufactures (excluding that part of semimanufactures which are subject to further processing within the givin enterprise) and also industrial processing performed for other enterprises.

Industrial gross and commodity production is planned according to the plant method (zavodskiy method). The essence of the plant method is that the value of that part of the output which is utilized within the given enterprise for its own needs is excluded from the value of the planned production of finished products, semimanufactures, and industrial processing work.



Under the plant method of planning, a combine consisting of individual enterprises such as factories and plants (providing these enterprises do not operate on an independent balance), is considered as a single enterprise.

It must be said that in the practice of planning and calculating gross production, partial digressions from the plant method are permitted for several

These deviations are permitted, for the most part, for enterprises whose output is connected with the reprocessing not only of their own products and semimanufactures, but of products and semimanufactures received from the outside (enterprises of the meat, sugar, and other industries).

The plant method of planning gross production is particularly important. It corresponds to the cost accounting system of socialist production management. In addition, under the plant method, the goals of the national economic plan for individual enterprises. At the same time, the plant method of planning reflects based on actual national economic problems at a particular stage of socialist development.

Gross production is distinguished from commodity production by the fact that the value of raw materials and stocks supplied and paid for by the customer and the value of the net balance of unfinished output semimanufactures, instruments, and equipment produced within the enterprise is included in the composition of gross production.

To determine the planned goals for the volume of gross and commodity production, it is necessary to make a special computation of gross and commodity production by ministry, department and enterprise. Such a computation is made up according to a definite chart, as follows:



## Sample Chart for Computing Industrial Gross and Commodity Production

Indexes of Composition in Physical (Natural'nyy)
Production
Terms

etion Enterprise
ysical Wholesale Price
ral'nyy) per Unit of
Production

Current Time of Drawing of Flan Value of Production in Enterprise Wholesale Prices

Unit of
Measurement
Quantity
As of
1 Jan 52

As of

July Jan 52

Current at
Time of
Drawing Up

Finished products (output) and semimanufactures for outside delivery

Industrial Processing work for outside customers

Total commodity production (less value of customers' raw materials)

Value of accretion (-) or loss decreases (-) in balances of unfinished output, semimanufactures produced by plant, tools, attachments, spare parts, auxiliary materials, etc.

Value of customers' raw materials

Value of products and semimanufactures of own production included in gross production under a system other than plant method

Total gross production

The basic element of gross and commodity production of an industrial enterprise is the finished output completed during production [process] and earmarked for outside sale.

The full value of all finished output earmarked for outside sale, irrespective of whether it was produced from the stocks and raw materials of the enterprise or from the stocks and raw materials of a customer, is included in gross production, inasmuch as the ownership of the raw materials has no significance in determining the volume of gross production.



In addition, not only is the stage of completion of a product important, but also its suitability for immediate usage. The latter may be determined by the enterprise's department of technical control (OTK) or the customer. Therefore, current instructions for calculating the production of industrial enterprises stipulate that products are considered as finished only when they are completely assembled and correspond exactly to the established standards (or, in the absence of standards, to the technical specifications established by the minister or his deputy). The products must also be accepted by the OTK and furnished with a certificate or other document attesting to their quality and be actually delivered to the finished products warehouse with appropriate delivery forms.

Whenever the established procedure does not require the products to be delivered to the warehouse (large machines, etc.), items accepted by OTK and the sales department are considered as finished output. Whenever products are shipped to the consumer from the shop storehouse (acid, superphosphate, etc.), the output delivered to shop storehouses and recorded in delivery documents attains the same status as that delivered to the finished products warehouse.

Semimanufactures produced within the plant include items for which the technological process of production was completed in one shop, but which either partially or completely are still subject to further processing or assembly in another shop of the enterprise.

Products which are not completely processed and assembled in the individual shops of the enterprise and which fail to conform to the specifications and criteria applied to finished production and semimanufactures are considered as unfinished output. Unfinished output is an element of gross production only. For industry as a whole the net balance of unfinished output amounts to about 0.5 to 1.0 percent of all gross production. In a number of industrial branches this figure does not exceed 0.1 to 0.2 percent; and only in machine building does the average constitute 3 to 5 percent. Therefore, in the interest of simplifying the computation of gross production, the value of the net balance of unfinished output is included only in the gross production of machine-building enterprises, repair plants, and enterprises manufacturing metal structural shapes. In addition, changes in the net balance of unfinished output at the above enterprises is calculated together with the changes in the net balance of the semimanufactures produced within the plant.

The value of tools, dies, attachments, casting frames, patterns, spare parts, and materials of its own production earmarked for consumption within the given enterprise (providing the above-mentioned items and other products are considered as part of the enterprise's fixed capital) is included in gross production in full value, i.e., the same as the value of finished products earmarked for outside delivery. When tools, dies, attachments, and other items produced within the plant are not included in the fixed capital of the enterprise, but are considered in the cost of production, the difference between the value of the balance of tools, dies, attachments, and other self-produced items at the end and at the beginning of the planning period is included in gross production.

As was already noted, the value of industrial processing work is included in gross production. This work comprises capital and current repair of equipment, transport facilities, mechanisms, tools, furniture, footwear, sewn goods, etc., performed by enterprises on contract. This type of work also includes capital repair of equipment, transport facilities, and stock performed by the labor force of a given enterprise, whenever the value of this equipment, transport facilities, and stock is included in the composition of fixed capital of the given enterprise.



Industrial processing work is also included in gross and commodity production according to the value of the work performed, and including the value of the necessary materials and parts, but excluding the value of the products, materials, and parts received from the customer for processing or repair.

The modern industrial enterprise is allied with the basic production of a number of other, nonindustrial enterprises. To this group belong subsidiary agricultural enterprises, construction departments, transport organizations, dining rooms, public baths, barber shops, etc. The output of these nonindustrial enterprises in the national economic plan is accounted for within the framework of its corresponding branches, for example -- the products of subsidiary agricultural enterprises, with agriculture; the products of dining rooms, with retail commodity turnover; public baths and barber shops, with the municipal economy, etc.

Only that part of material wealth which is created by an industrial enterprise as a result of the work of production shops -- basic, subsidiary, accessory, and auxiliary -- i.e., as a result of the fundamental activity of an industrial enterprise, is considered as industrial production.

Raw materials, stocks, electric power, gas water, and other material stocks cannot be regarded as the output of a given enterprise if they are not subject to processing within the confines of the given enterprise. Also not considered as output are all sorts of production waste originating in the production process (filings, shavings, scraps, etc.)

The products created by an enterprise must satisfy specific requirements so that they can be utilized for their designated purpose. The work of an enterprise resulting in a product which cannot be utilized for its designated purpose, is considered as production waste.

For individual branches of industry there are additional instructions for planning gross and commodity production which take into consideration the specific peculiarities of these branches.

For example, the value of purchased electric power intended for outside distribution is incl.ded in the commodity production of electric power stations. The value of water intended for distribution to consumers, including the value of purchased water, is included in the commodity production of municipal water suppliers. Gross and commodity production of peat industry enterprises are determined by the production phases (processes) -- extraction, shipment, etc.

The basic cost accounting production unit in industry is the enterprise (factory, plant, mine, etc.) set apart in an administrative-production relation. The essential criterion of an industrial enterprise, in addition to production and technical unity (yedinstva), administrative unity existence of cost accounting, an independent production plan, and a separate settlement account in Gosbank, is a complete system of accounting showing profits and losses, i.e., an independent balance.

The absence of an independent balance identifies an enterprise as subsidiary relative to the basic operations of the organization on whose balance this enterprise depends. As a rule, subsidiary enterprises depend on the balances of nonindustrial organizations -- construction, sales, educational, scientific research, administrative, medical-prophylactic, etc.

Existing instructions for planning and calculating gross industrial production stipulate that the production of subsidiary and auxiliary shops of industrial enterprises (peat processing, timber cutting, machine repair shops), not operating on an independent balance, are planned in common with all the other shops of the given industrial enterprise on whose balance they depend.



The production of subsidiary and auxiliary shops (subsidiary production) consumed within the enterprise of which they are a part is considered as internal turnover and is not included in gross production, but output earmarked for outside delivery is included in the enterprise's over-all gross and commodity production.

The gross production of subsidiary industrial enterprises amounts to no more than 4 to 5 percent of the over-all volume of all industrial gross production. Therefore, the centralized establishment of separate goals in the plan for the tremendous number of small subsidiary enterprises whose output is designated mainly for the needs of the organizations of which these subsidiary organizations are a part, has been acknowledged as inexpedient. Since 1954, only the gross and commodity production goals of industrial enterprises with an independent balance have been included in the state national economic plan.

The problem of prices in which gross production is planned and calculated has great significance in planning industrial production. Up to 1927 industrial output was computed in 1911-1912 prices. From 1927 to 1949 industrial gross production was planned and computed in unchangeable 1926-1927 prices. (Editor's note: Production of cooperative industry was computed in 1932 prices from 1932 to 1949, and for inclusion into the over-all total of gross production it was recomputed according to branch-oblast price indexes in unchangeable 1926-1927 prices.)

Unchangeable 1926-1927 prices played a positive role in their time. Gross production in unchangeable 1926-1927 prices served as a basis for calculating the index of the physical volume of production and for planning labor productivity of industrial workers. However, with the rapid growth of socialist industry, and greater utilization of new types of products, the computation of gross production, in unchangeable 1926-1927 prices, reflected to a much lesser extent the actual value of relationships in the economy. As a result of the tremendous changes in industry, the question arose as to the necessity of computing industrial production in other, comparable prices.

In 1949 the transition to planning and computing industrial output in current wholesale prices, based on the wholesale price reform of 1 January 1949, was effected. At the same time, calculation of industrial output in unchangeable 1926-1927 prices was retained for the years 1949 and 1950. This was necessary for obtaining data on annual industrial output comparable with the goals of the 1946-1950 5-year plan, which was drawn up in unchangeable 1926-1927 prices.

The evaluation of industrial output in current wholesale prices provided a link of the production output plan with the cost plan indexes. However, in connection with the systematic reduction of prices for industrial output, comparative data on the magnitudes of gross production for different periods could have been obtained by means of a direct calculation of output in physical terms for different periods in the same prices, or through recomputing gross production by means of price indexes. This created difficulties in calculating and planning industrial output in current prices and, in addition, led to an increase in the number of indexes.

The very planning and calculation of industrial gross production in comparable prices free the planning organs and enterprises from recomputing gross production plans, simplify statistical accounting and guarantee the obtaining of comparable industrial production data for different periods. Therefore, since 1952, gross industrial production for the USSR as a whole, and for ministries, departments, and enterprises, has been planned and calculated in enterprise wholesale prices as of 1 January 1952, i.e., in prices minus the turnover tax.



The planning and calculation of labor productivity is effected on the basis of the volume of gross production, computed in enterprise wholesale prices as of 1 January 1952. For linking the volume of industrial output with production costs and financial indexes, the planning and calculation of commodity production in current enterprise wholesale prices are retained.

The planning of gross and commodity production in enterprise wholesale prices is carried out according to current wholesale list prices. When the established wholesale prices include turnover tax, then in computing gross and commodity production, turnover tax is deducted as follows: in calculating gross production, at rates in existence as of 1 January 1952; in calculating commodity production, at rates in existence at the time the plan is drawn up.

It is well known that a number of industrial products have prices quoted FOB point of destination (ferrous metals, cement, roofing materials, etc.) and include expenses for the maintenance of the sales organizations. Therefore, in determining the gross and commodity production from wholesale list prices, FOB point of destination, expenses for the maintenance of sales organizations are excluded when these expenses and the shipping costs are not included in the supplier enterprise production cost.

On items for which only retail prices are established, in place of enterprise wholesale prices, retail prices are employed, less trade discounts, turnover tax, as well as expenses for the maintenance of sales organizations (where prices are quoted FOB point of destination), if these expenses and shipping costs are not included in the supplier enterprise production cost.

In practice, difficulties frequently arise in connection with the evaluation of new types of products on which there were no prices on 1 January 1952. In such cases, in place of enterprise wholesale 1 January 1952 prices, those prices which are established for new types of products are accepted, providing there has not been a large price reduction on analogous types of products since 1 January 1952. If a large price reduction has taken place, the inclusion in gross and commodity production of new types of products at current prices would mean an artificial lowering of the volume of gross production. It is obvious that, with a systematic reduction of prices, current prices for new types of products in computing gross production should be recomputed in 1 January 1952 prices by employing an index which expresses the ratio of the value of production in current prices to its value in 1 January 1952 prices.

Such an adjustment coefficient is also employed in the computation of changes in the balance of semimanufactures, incompleted production, tools, model, and other output of plant's own manufacture whenever wholesale 1 January 1952 prices on these items are not available.

In connection with the transition to planning gross production in enterprise wholesale 1 January 1952 prices, state statistical organs, ministries, departments, and enterprises have recomputed gross production for 1950 and 1951 in prices in effect as of 1 January 1952. Consequently, in addition to the data on gross production for the period prior to 1950 in unchangeable 1926-1927 prices, calculation of gross production as of 1950 in enterprise wholesale 1 January 1952 prices is also possible.

In this connection, the question arises as to how the growth of gross production is determined for example, for 1953, in relation to 1940. The chain by Gosplan and the Central Statistical Administration, and is illustrated by the following formula:



<u>1953</u> 1940 1950, in unchangeable 1926-27 prices 1940, in unchangeable 1926-27 prices

1953, in enterprise wholesale prices as of 1 Jan 52 1950, in enterprise wholesale prices as of 1 Jan 52

The growth of gross production in 1953 in relation to 1940 can also be computed by recomputing gross production for 1953 from enterprise wholesale 1 January 1952 prices in unchangeable 1926-1927 prices, and vice versa, and 1940 gross production from unchangeable 1926-1927 prices in enterprise 1 January 1952 wholesale prices. For this the indexes of enterprise wholesale prices as of 1 January 1952 relative to unchangeable 1926-1927 prices are ascertained. However, this is complicated and labor-consuming work.

The employment of the chain method frees the planning and statistical organs from such cumbersome work. In addition, it must be taken into account that recomputing gross production in the prices of another period leads to the isolation of planning and calculating the dynamics of production for a series of years from the planning and calculating of the fulfillment of current plans; the recalculation of the relationship of wholesale prices formed on various articles in 1953, for example, will be applied to 1940 production. At the same time, the chain method does not violate wholesale price relationships.

The transition to evaluating industrial production in enterprise 1 January 1952 wholesale prices permitted a significant improvement in planning and calculating gross production. The planning and calculation of gross production in comparable prices, especially within the limits of each 5-year plan, is absolutely necessary. It is also obvious that in using comparable prices one must take those prices which most correctly reflect the value relationships among the outputs of individual industrial branches.

In 1955 new, reduced wholesale prices on heavy industrial products, and rates on electric and heating power and freight shipments are being put into effect. The basis for this wholesale price revision is the great successes attained in the development of the socialist economy, on the basis of which changes in the output costs of individual branches of the national economy have taken place.

The value relationships among the outputs of individual industrial branches and within these branches among various groups of products, determined by 1955 prices, will, of course, differ from the relationships determined by the 1952 prices. Therefore the continued use of 1952 wholesale prices will not facilitate the expansion of production and the economy of material expenditures necessary to the national economy. In addition, during the period 1952-1955, USSR industry, relying on the achievements of Soviet science, organized the production of a number of new types of machines, equipment, and products; in determining the volume of gross production, they are, as a rule, being evaluated in current prices. The continued use of enterprise 1 January 1952 wholesale prices, in place of comparable prices for determining gross production, will create a disparity between the dynamics of the growth of gross production and of the growth of the physical volume of production. In this connection, beginning with 1956, the planning of industrial gross production will be carried out in new enterprise wholesale prices put into effect on 1 July 1955.

The rates of growth in the production of producer goods (Group A) and the production of consumer goods (Group B) have been established along with the rates of growth of socialist industry as a whole, in the state plan for the development of the USSR national economy. The rates of growth in the production of producer goods and the production of consumer goods are determined in conformance with the directives of the Communist Party and the



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Soviet government. The important task for determining the rates of growth of socialist industry is to provide for the preferential development of heavy industry which produces the means of production for the enterprises of all the branches of the national economy.

In addition to determining the rates of growth in the production of producer goods (Group A) and production of consumer goods (Group B), an analysis is made of the share of these groups in the over-all volume of industrial production. Enterprise wholesale prices in a number of light and food industry branches include turnover tax which is included in the value of the processed raw materials. Therefore, in determining the share of production of Group A and Group B turnover tax accounted for in the value of processed raw materials in light and food industry branches is This guarantees comparability of the indexes of the volume of producer goods production and the volume of consumer goods production.

